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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/053,650	04/02/1998	KWANG CHEOL JOO	03586.0013	1592

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
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EXAMINER

BROWN, RUEBEN M

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 01/15/2004

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/053,650

Applicant(s)

JOO ET AL.

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-29 and 31-52 is/are pending in the application.
- 4a) Of the above claim(s) 33-41 and 47-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-29, 31, 32 and 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15, 16. 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Claims 33-37, 38-41 & 47-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 20.

Response to Arguments

2. Applicant's arguments with respect to claims 27-29, 31-32 & 42-46 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 27-29, 31-32 & 42-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Metz, (U.S. Pat # 5,666,293).

Considering claim 27, the amended claimed first domain for storing a version number of the control program is met by the discussion of Metz, storing the version number of the current operating system in STB memory, (col. 5, lines 41-45; col. 9, lines 58-60 & col. 36, lines 29-34). The claimed second domain for storing a downloaded program is broad enough to read on the storage of either a downloaded application program or operating system, col. 4, lines 11-19; col. 5, lines 60-65 & col. 6, lines 55-58.

The claimed second domain for storing a predetermined version number of a downloaded program indicating a version of the downloaded program reads on the operation of Metz, since in order to check the version number of an incoming operating system, against the version number of a currently running operating system, the system inherently at least momentarily stores the version number of the instant incoming operating system, see col. 9, lines 55-60 & Fig. 9, step 54.

As for the claimed third domain for storing the control program, Metz discloses that when the version number of the incoming operating system does not match the version number of the current operating system, that the incoming operating system is extracted from the received transport stream and stored in RAM, col. 10, lines 1-9 & col. 17, lines 45-56. Hence in Metz, the downloaded operating system is only extracted and stored in RAM if it is an upgraded

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version of the current operating system. Once the system confirms that there are no errors in the downloaded operating system, the instant upgraded operating system is transferred to non-volatile memory. The above passage reads on the claimed third domain for storing the control program.

The additionally claimed feature of the microcontroller replacing the control program in the storage element on the basis of the control information signal, the version number of the control program and the predetermined version is the very essence of Metz, and is therefore anticipated, (Abstract; col. 5, lines 47-50 col. 9, lines 65-67 & col. 17, lines 39-50). Moreover as discussed above, Metz unambiguously discloses that upgrading algorithm includes the microprocessor 110 terminating the current operating system, copying the extracted operating system from RAM 122 into flash memory 121, rebooting the system and then running the new operating system; see col. 38, lines 6-60.

Regarding the newly amended claimed feature of a fourth domain for storing a bootstrap program, such that the bootstrap program controls an initial boot routine that automatically updates the downloaded program when the downloaded program is incomplete. Metz discloses that the system operates according to a bootstrap program; see col. 22, lines 26-51; col. 23, lines 4-6 & col. 23, lines 49-55. Metz also teaches that when downloading operating system software, the microprocessor performs a checksum to see if there are errors in the received data, and if so, the microprocessor returns to step S5 and again extracts the relevant operating system from the

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broadcast carousel, col. 37, lines 44-54. Therefore the procedure identified by Metz reads on the newly claimed subject matter.

Considering claims 28 & 45, wherein the broadcast signal includes a PID in order to identify the type of information of the broadcast signal, Metz teaches such a feature, col. 14, lines 18-35 & col. 36, lines 54-56.

Considering claim 29, the DET 102 of Metz includes RAM 122, for temporarily storing downloaded software, col. 10, lines 1-15.

Considering claims 31 & 44, Metz also utilizes flash memory, col. 8, lines 9-12 & 17, lines 44-46.

Considering claim 32, the claimed processor for separating the control information signal from the broadcast signal reads on the disclosure of Metz, which teaches extracting the downloaded program from the transmission stream, col. 10, lines 1-5.

Considering claim 42, the claimed method for downloading a control program from a broadcast signal, including steps that correspond with subject matter mentioned above in the rejection of claim 27 are likewise analyzed. In Metz, the system extracts a downloaded particular upgraded operating system only if its version is a certain value, otherwise the system

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continues to use the previously stored operating system, col. 5, lines 38-50; col. 9, lines 50-67 thru col. 10, lines 1-15 & col. 36, lines 28-55.

As for the amended claimed feature of performing the steps during an initial boot routine, Metz teaches that when the set-top box 100 is first connected to power, it runs a self-diagnostic specified by a loader routine, col. 23, lines 49-51. Moreover, Metz discloses that the self-diagnostic routine can determine whether or not an operating system upgrade is necessary; see col. 24, lines 3-10.

Considering claim 43, see Metz, col. 5, lines 38-50 & col. 38, lines 5-27.

Considering claim 46, Metz discloses storage space for storing a version number of the control program, col. 5, lines 40-45 & col. 9, lines 55-60. Metz also discloses storing and utilizing a downloading program, col. 9, lines 20-54. Moreover Metz teaches that the downloaded control program is stored in the memory of the DET 102, col. 8, lines 12-14 & col. 10, lines 1-5.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Heath Teaches downloading software according to version number and initiating a process to reload software, when errors or corrupted data are found in prior download, col. 4, lines 35-45; col. 5, lines 1-5 & col. 6, lines 45-57.

B) Hoggarth General teaching of bootstrap routine.

C) Kullick & Shaw General teachings of downloading software according to version numbers.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 746-6861 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the
organization where this application or proceeding is assigned is (703) 872-9306 for regular
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown



VIVEK SRIVASTAVA
PRIMARY EXAMINER